

AMMONIA RECOVERY IN THE PREPARATION  
OF SILAZANES AND POLYSILAZANES

ABSTRACT OF THE DISCLOSURE

5 Silazanes and/or polysilazanes are prepared by ammonolysis reaction in liquid anhydrous ammonia by introducing at least one halosilane into the ammonia. In addition to the silazane and/or polysilazane, an ammonolysis by-product also results. A substantially more efficient process is disclosed for treating the  
10 by-product through the addition of a liquid, namely water, or a solution comprising a strong base, or an aqueous acid solution. The process may be employed for more efficient, economical recovery of ammonia from such waste stream solutions of ammonia halide, or acids thereof for use as recycle in the further production of  
15 silazanes and polysilazanes, and/or for producing a less hazardous, more readily disposable salt residue thereof.